

REMARKS

Claims 1-24, 31-33, and 37-39, are all the claims pending in the application. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

Reissue Applications

Upon indication of allowable subject matter in this Reissue application, Applicants will surrender the original patent, or make a statement as to loss or inaccessibility of the original patent.

Drawings

The Examiner objected to the drawings as not showing every feature of the invention specified in the claims. Specifically, the Examiner asserted that the optical encoder and the magnetic encoder must be shown.¹ Applicants respectfully traverse this objection for the following reasons.

On July 29, 2003, Applicants filed a proposed drawing correction sheet having a new Fig. 8, which shows an encoder in general. That is, the encoder in proposed new Fig. 8 is exemplary of both an optical encoder and a magnetic encoder. The Examiner has not accepted this drawing because he asserts that there is no support in the specification for a sealed actuator using an encoder. As noted below, with respect to the rejection made under §112, 1st paragraph, the specification does provide support for a sealed actuator using an encoder, as shown in Fig. 8.

Accordingly, Applicants respectfully request that the Examiner withdraw this objection, and accept Fig. 8 as submitted with the Amendment filed on July 29, 2003.

Claim Rejections - 35 U.S.C. § 112

The Examiner rejected claims 31-33 and 37-39 under §112, 1st paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably

¹ November 14 Office Action at page 2, item 2.

convey to one skilled in the relevant art that the inventors had possession of the claimed invention. Applicants respectfully traverse this rejection for the following reasons.

First, Applicants' arguments as set forth in the Amendment filed on July 29, 2003, at pages 9-11, are still pertinent and, therefore, are incorporated herein by reference.

Second, the Examiner's "Response to Arguments" is mistaken.

Initially, the Examiner asserts that the specification does not support use of optical and magnetic encoders in the Applicants' invention because "[t]he specifications specifically teaches that they are not suitable (col. 14, lines 55-63) for use because of deficiencies of the semiconductor use in a vacuum."² But the Examiner reads the specification too narrowly, and the "teaching away" too broadly. That is, the specification broadly is drawn to a "sealed actuator", not only one for use in a vacuum environment, which is only one exemplary embodiment. Further, the specification's alleged "teaching away" pertains only narrowly to one embodiment—the actuator as used in a vacuum environment. Accordingly, as noted in the original specification, when not in a vacuum environment, optical and magnetic encoders provide "high accuracy smooth driving."³

Further, the Examiner asserts that the original application supports his rejection "because the Applicant never claimed optical and magnetic position detectors."⁴ Again, the Examiner's interpretation of the original application is mistaken. Original claim claims 13 and 16 encompass optical and magnetic encoders and, therefore, Applicants had indeed originally claimed these elements. Specifically, original claims 13 and 16 set forth a "displacement measuring means". As set forth in the original specification, "an optical encoder or a magnetic encoder using a magnetic resistance element is used as position detecting means for high accuracy smooth driving."⁵

² November 14 Office Action at page 6, item 14, paragraph 2, lines 1-5.

³ Specification at col. 14, lines 41-49.

⁴ November 14 Office Action at the paragraph bridging pages 7 and 8, lines 5-9.

⁵ Specification at col. 14, lines 41-44.

For at least any of the above reasons, this rejection is believed to be in error and should be withdrawn.

Claim Rejections - 35 U.S.C. § 102

- The Examiner rejected claims 31, 32, 37, and 38, under §102(b) as being anticipated by Applicants' Admitted Prior Art (hereinafter the APA) or, in the alternative, under §103(a) as being obvious over the APA in view of WO 94/23911 to Hofmeister (hereinafter Hofmeister).

Applicants respectfully traverse this rejection because the APA fails to disclose every element as set forth in Applicants' claims, and because the APA in combination with Hofmeister fails to establish *prima facie* obviousness in that the references fail to teach or suggest every element as set forth in Applicants' claims.

First, Applicants' arguments as set forth in the July 29 Amendment at pages 11-13 are still pertinent and, therefore, are incorporated herein by reference.

Second, the Examiner's "Response to Arguments" again is mistaken. Specifically, the Examiner asserts "Applicant's argument that the partition walls must be non-magnetic is not persuasive because the AAPA teaches the walls are non-magnetic (col. 3, line 1-2)."⁶ But the Examiner mixes up two different pieces of prior art as disclosed in the present specification.

The first type of prior art is exemplified by Japanese Patent Unexamined Publication Nos. Hei 03-140041 and '042, as disclosed from col. 2, line 55 to col. 3, line 23. In this type of prior art, there is used a nonmagnetic metal, as noted by the Examiner.

The second type of prior art is exemplified in Fig. 7 of the specification, and is described from col. 3, line 24 - col. 4, line 9. In this second type of prior art, there are used "nonmetal partition walls 216a and 236a ..." ⁷ And it is this second type of prior art on which the Examiner relies in his statement of the rejection. Specifically, the Examiner asserts that the "AAPA shows

⁶ Office Action at page 7, 1st full paragraph, at lines 1-2.

⁷ Specification at col. 3, lines 47-52.

but does not describe optical encoders below bearing 219.”⁸ And element 219 is shown in the Fig. 7 prior art.

Accordingly, the Examiner has mixed the disparate teachings of two different types of prior art without providing any motivation for doing so; this he cannot do. After all, even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. *In re Kotzab*, 55 USPQ2d at 1316-1317 (citing *B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996)); *see also* MPEP § 2142.

For at least any of the above reasons, this rejection is believed to be in error and should be withdrawn.

Claim Rejections - 35 U.S.C. § 103

- The Examiner rejected claims 31, 32, 37, and 38, under §103(a) as being unpatentable over the APA and US Patent 2,887,062 to Cametti (hereinafter Cametti) and Hofmeister. Applicants respectfully traverse this rejection for at least the following three reasons.

First, because this rejection is based on the APA and Hofmeister, Applicants’ arguments as set forth above are pertinent here and, therefore, are incorporated by reference. Further, Cametti does not teach or suggest anything to cure the above-noted deficiencies in the Examiner’s attempted combination of the APA and Hofmeister.

Second, with respect to claim 31, the Examiner fails to establish *prima facie* obviousness.

Claim 31 sets forth a partition wall disposed between a reinforcing means and a motor rotor. For example, as shown in Fig. 1, one embodiment of the invention consistent with that in claim 1 includes a partition wall 33 disposed between a reinforcing means 40, 41 and a motor rotor 12.

The Examiner interprets the APA’s thickened portion of the partition wall 216a as a reinforcing means. But then the partition wall 216a is not disposed between the thickened portion and the motor rotor 207. See Fig. 7 in the present specification. Further, although the

⁸ November 14 Office Action at page 4, item 9, lines 11-12.

Examiner asserts that Cametti teaches a partition wall 12 between supports 8, 9, and the rotor 15, he does not provide any motivation for combining such a teaching with the APA, which he must do. After all, most if not all inventions arise from a combination of old elements. *In re Kotzab*, 55 USPQ2d at 1316 (citing *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998)). Thus, every element of a claimed invention may often be found in the prior art. *Id.* However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. *Id.* Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Kotzab*, 55 USPQ2d at 1316 (citing *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); and *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

Third, with respect to claim 37, Applicants' arguments as set forth on page 14 of the July 29 Amendment are still pertinent and, therefore, are hereby incorporated by reference. In particular, the APA discloses bearings 218 that are disposed directly on the partition wall 216a. Similarly, Cametti discloses motor-rotor-support bearings 21, 23, 31, all of which act so as to transfer a force from the rotor 15 to the thin walled cylinder 12, which the Examiner cites as being a partition wall. Accordingly, even if one of ordinary skill in the art were motivated to combine the references as suggested by the Examiner, any such combination would still include rotor-support bearings that act to exert a load on the partition wall; it would not teach or suggest bearings located at positions on the housing at both sides of the partition wall in a longitudinal direction of the motor rotor so that the housing directly receives a load applied to the bearings, as set forth in claim 37. On the other hand, as shown in Fig. 1 of the present specification, one embodiment consistent with that set forth in claim 37 includes bearings 17, 18 located at positions on the housing 23, 24 (via respective mounting members 22A, 22b) at both sides of the partition wall 33 in a longitudinal direction of the motor rotor 12 so that the housing 23, 24 directly receives a load applied to the bearings 17, 18. That is, the load from the bearings is transferred to the housing 23, 24 without passing through the partition wall 33, so as not to deform the partition wall 33.

Accordingly, for at least any of the above reasons, the Examiner's attempted combination of the APA with Hofmeister and Cametti fails to render obvious Applicants' claims.

- The Examiner rejected claims 33 and 39 under §103(a) as being unpatentable over the APA and Cametti and Hofmeister, in further view of FR 2,527,854 to Jacquin (hereinafter Jacquin). Because this rejection is based on the APA, Cametti, and Hofmeister, Applicants arguments as set forth above are pertinent here and, therefore, are incorporated herein by reference. Further, Jacquin does not teach or suggest anything to cure the above-noted deficiencies in the Examiner's attempted combination of the APA, Cametti, and Hofmeister.

Allowable Subject Matter

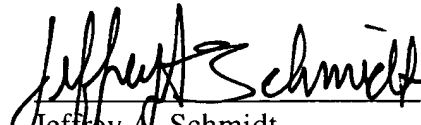
Applicants thank the Examiner for indicating that claims 1-24 are allowed.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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